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WIESNER & ASSOCIATES 366 CAMBRIDGE AVENUE PALO ALTO, CA 94301			POPHAM, JEFFREY D	
			ART UNIT	PAPER NUMBER
			2137	

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/930,029

Applicant(s)

SWEET ET AL.

Examiner

Jeffrey D. Popham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 and 52-58 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-22 and 52-58 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 30 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

***Remarks***

Claims 1-22 and 52-58 are pending.

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-22 and 52-58 have been considered but are moot in view of the new ground(s) of rejection.

The declaration filed on 6/9/2006 under 37 CFR 1.131 has been considered but is ineffective. The declaration does not clearly explain what applicant is relying on to show conception prior to the "critical date". Applicant has only provided vague and general statements regarding the conception of the invention occurring prior to the effective date, such as those in numerals 7 through 11 of the declaration. Applicant must give a clear explanation of the exhibits pointing out exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33. See also *In re Harry*, 333 F.2d 920, 142 USPQ 164 (CCPA 1964) (Affidavit "asserts that facts exist but does not tell what they are or when they occurred.").

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 15, 16, 19, 20, and 52-57 are rejected under 35 U.S.C. 102(e) as being anticipated by Colosso (U.S. Patent 6,169,976).

Regarding Claim 1,

Colosso discloses a method for providing cryptographic capabilities to a plurality of network users over a decentralized public network comprising receiving a request for an access permission security profile on behalf of a network user (Column 8, line 55 to Column 9, line 39; and Column 13, lines 7-19); authenticating the request (Column 10, lines 25-49; and Column 11, lines 9-34); creating the access permission security profile to be used in forming a cryptographic key for enabling the network user to decrypt selected portions of an encrypted object and to encrypt selected portions of a plaintext object (Column 8, line 55 to Column 9, line 39; and Column 12, line 65 to Column 15, line 25); and securely transmitting the access permission security profile to the network user over the network (Column 12, line 65 to Column 15, line 25).

Regarding Claim 2,

Colosso discloses that the creating step comprises identifying one or more groups of network users who are to be provided with cryptographic capabilities; establishing one or more access codes for each group wherein each access code is adapted to be combined with other components to form a cryptographic key; and creating one or more

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security profiles for each network user, wherein each security profile contains at least one access code (Column 12, line 65 to Column 16, line 9).

Regarding Claim 3,

Colosso discloses that each group is a category, organization, organization unit, role, work project, geographical location, workgroup, or domain (Column 11, line 57 to Column 12, line 18).

Regarding Claim 4,

Colosso discloses a method for providing decryption capabilities to a plurality of network users over a decentralized public network comprising receiving a request for decryption capabilities on behalf of a network user (Column 8, line 55 to Column 9, line 39; and Column 13, lines 7-19); authenticating the request (Column 10, lines 25-49; and Column 11, lines 9-34); creating an access permission security profile to be used in forming a cryptographic key for enabling the network user to decrypt an encrypted object (Column 8, line 55 to Column 9, line 39; and Column 12, line 65 to Column 15, line 25); receiving from the user information associated with the encrypted object (Column 12, line 65 to Column 15, line 25); generating a cryptographic key using the access permission security profile and the received information associated with the encrypted object (Column 12, line 65 to Column 15, line 25); and securely transmitting the

cryptographic key to the network user over the network (Column 12, line 65 to Column 15, line 25).

Regarding Claim 5,

Colosso discloses that the creating step includes identifying one or more groups of network users who are to be provided with cryptographic capabilities; establishing one or more access codes for each group, wherein each access code is adapted to be combined with other components to form a cryptographic key; and creating one or more security profiles for each network user, wherein each security profile contains at least one access code (Column 12, line 65 to Column 16, line 9).

Regarding Claim 6,

Colosso discloses that each group is a category, organization, organization unit, role, work project, geographical location, workgroup, or domain (Column 11, line 57 to Column 12, line 18).

Regarding Claim 52,

Colosso discloses a centralized security management system for distributing cryptographic capabilities to a plurality of network users over a decentralized public network comprising a plurality of member tokens for providing cryptographic capabilities to authenticated users of the decentralized public network (Column 12, line 65 to Column 15, line 25); a set of server systems for managing the distribution of the member tokens

(Column 12, line 65 to Column 15, line 25); means for requesting a member token from at least one server system (Column 8, line 55 to Column 9, line 39; and Column 13, lines 7-19); a set of client systems, wherein each client system includes means for receiving the requested member token and means for utilizing the cryptographic capabilities provided by the member token for selective encryption and decryption (Column 12, line 65 to Column 16, line 56); and means for securely distributing a requested member token from at least one server system to at least one client system over the decentralized public network (Column 12, line 65 to Column 15, line 25).

Regarding Claim 54,

Colosso discloses that the means for requesting a member token resides on each client system (Column 8, line 55 to Column 9, line 39; and Column 13, lines 7-19).

Regarding Claim 55,

Colosso discloses that means for authenticating a user resides on at least one server system (Column 12, line 65 to Column 15, line 25).

Regarding Claim 56,

Colosso discloses that managing the distribution of the member tokens includes dynamic updating of the member tokens (Column 16, line 60 to Column 18, line 2).

Regarding Claim 15,

With respect to claims 1 and 4, Colosso discloses that the request is initiated in band by the network user over the network (Column 8, line 55 to Column 9, line 39; and Column 13, lines 7-19).

Regarding Claim 16,

With respect to claims 1 and 4, Colosso discloses that the access permission security profile is in the form of a token that is adaptable to expire (Column 14, line 65 to Column 15, line 25).

Regarding Claim 19,

With respect to claims 1 and 4, Colosso discloses that the authenticating step includes the use of a software token (Column 10, lines 25-49; and Column 11, lines 9-34).

Regarding Claim 20,

With respect to claims 1 and 4, Colosso discloses that the authenticating step includes the use of a user password (Column 10, lines 25-49; and Column 11, lines 9-34).

Regarding Claim 57,

With respect to claims 1, 4, and 52, Colosso discloses that the decentralized public network is the Internet (Column 6, lines 15-29).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:



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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7-11, 13-16, 19, 20, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colosso in view of Shanton (U.S. Patent 5,680,452).

Regarding Claim 7,

Colosso discloses a method for cryptographically securing the distribution of information over a decentralized public network to a plurality of network users comprising:

Creating a computer representable data object (Column 1, lines 16-21);

Creating one or more access permission credentials (Column 8, line 55 to Column 9, line 39; and Column 12, line 65 to Column 15, line 25);

Assigning an access permission credential wherein the access permission credential ensures that only authorized users are able to decrypt encrypted objects (Column 12, line 65 to Column 15, line 25);

Authorizing at least one network user from the plurality of network users (Column 12, line 65 to Column 15, line 25); and

Transmitting the data object over the network (Column 12, lines 49-57);

But does not disclose the use of embedded objects within an object.

Shanton, however, discloses creating a computer representable data object including one or more embedded objects (Column 9, line 63 to Column 10, line 10); selecting one or more embedded objects of the data to be encrypted (Column 8, lines 1-42; and Column 9, line 63 to Column 10, line 10); encrypting the selected embedded objects (Column 8, lines 1-42; and Column 9, line 63 to Column 10, line 10); and assigning access rights to each of the selected embedded objects, such that only authorized users are able to decrypt encrypted embedded objects of the data object (Column 8, line 1 to Column 9, line 23). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the embedded object protection system of Shanton into the licensing system of Colosso in order to allow the system to be more flexible and offer still more protection, as well as to provide the ability to distribute the same object to many users, while allowing each user to have access to a personalized subset of the embedded objects.

Regarding Claim 8,

Colosso as modified by Shanton discloses the method of claim 7, in addition, Shanton discloses that the information is digital content (Column 4, line 38 to Column 5, line 9).

Regarding Claim 9,

Colosso as modified by Shanton discloses the method of claim 7, in addition, Colosso discloses that the authorizing step includes receiving a

request for an access permission security profile on behalf of a network user, authenticating the request, and securely transmitting the security profile to the network user over the network (Column 8, line 55 to Column 9, line 39; and Column 12, line 65 to Column 15, line 25).

Regarding Claim 10,

Colosso as modified by Shanton discloses the method of claim 7, in addition, Colosso discloses that the authorizing step includes sending a request for an access permission security profile on behalf of a network user to a centralized server system over the network, receiving the request at the centralized server system, authenticating the request, and securely transmitting the access permission security profile from the server system to the network user over the network (Column 8, line 55 to Column 9, line 39; and Column 12, line 65 to Column 15, line 25).

Regarding Claim 11,

Colosso as modified by Shanton discloses the method of claim 7, in addition, Colosso discloses that the authorizing step is automatic and based upon the user's possession of an access permission security profile (Column 12, line 65 to Column 15, line 25).

Regarding Claim 12,

Colosso as modified by Shanton discloses the method of claim 7, in addition, Colosso discloses that the encrypting step comprises identifying a group of network users who are to be allowed access to a data object to

be encrypted; generating an appropriate cryptographic credential key from a set of credential categories, the credential key relating to the group of network users; generating a cryptographic working key from at least a domain component, a maintenance component, and a pseudorandom component; encrypting the data object with the working key; encrypting the pseudorandom component with the credential key; and associating the encrypted pseudorandom component with the encrypted data object (Column 12, line 65 to Column 15, line 25).

Regarding Claim 13,

Colosso as modified by Shanton discloses the method of claim 10, in addition, Colosso discloses that the access permission security profile is created by identifying one or more groups of network users who are to be provided with cryptographic capabilities; establishing one or more access codes for each group, wherein each access code is adapted to be combined with other components to form a cryptographic key; and creating one or more security profiles for each network user, wherein each security profile contains at least one access code (Column 12, line 65 to Column 16, line 9).

Regarding Claim 14,

Colosso as modified by Shanton discloses the method of claim 13, in addition, Colosso discloses that each group is a category, organization,

organization unit, role, work project, geographical location, workgroup, or domain (Column 11, line 57 to Column 12, line 18).

Regarding Claim 15,

Colosso as modified by Shanton discloses the method of claim 9, in addition, Colosso discloses that the request is initiated in band by the network user over the network (Column 8, line 55 to Column 9, line 39; and Column 13, lines 7-19).

Regarding Claim 16,

Colosso as modified by Shanton discloses the method of claims 9-11, in addition, Colosso discloses that the access permission security profile is in the form of a token that is adaptable to expire (Column 14, line 65 to Column 15, line 25).

Regarding Claim 19,

Colosso as modified by Shanton discloses the method of claims 9 and 10, in addition, Colosso discloses that the authenticating step includes the use of a software token (Column 10, lines 25-49; and Column 11, lines 9-34).

Regarding Claim 20,

Colosso as modified by Shanton discloses the method of claims 9 and 10, in addition, Colosso discloses that the authenticating step includes the use of a user password (Column 10, lines 25-49; and Column 11, lines 9-34).

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Regarding Claim 53,

Colosso does not explicitly disclose that each client system further includes user authentication means.

Shanton, however, discloses that each client system further includes user authentication means (Column 8, lines 1-42). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the embedded object protection system of Shanton into the licensing system of Colosso in order to allow the system to be more flexible and offer still more protection, as well as to provide the ability to distribute the same object to many users, while allowing each user to have access to a personalized subset of the embedded objects.

Regarding Claim 57,

Colosso as modified by Shanton discloses the method of claim 7, in addition, Colosso discloses that the decentralized public network is the Internet (Column 6, lines 15-29).

4. Claims 17, 18, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colosso in view of Kennedy (U.S. Patent 6,084,968).

Regarding Claim 17,,

Colosso discloses the methods of claims 1 and 4, but does not disclose that the authenticating step includes the use of biometric information.

Kennedy, however, discloses that the authenticating step includes the use of biometric information (Column 3, line 8 to Column 4, line 38). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the security token of Kennedy into the licensing system of Colosso in order to provide for secure authentication of a user via biometrics, which are much more difficult to forge or break than a simple user password.

Regarding Claim 18,

Colosso discloses the methods of claims 1 and 4, but does not disclose that the authenticating step includes the use of a hardware token.

Kennedy, however, discloses that the authenticating step includes the use of a hardware token (Column 3, line 8 to Column 4, line 38). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the security token of Kennedy into the licensing system of Colosso in order to provide for secure authentication of a user via biometrics, which are much more difficult to forge or break than a simple user password.

Regarding Claim 58,

Colosso discloses the methods of claims 1 and 4, but does not disclose that the decentralized public network is a cellular phone network.

Kennedy, however, discloses that the decentralized public network is a cellular phone network (Column 3, line 8 to Column 4, line 38). It

would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the security token of Kennedy into the licensing system of Colosso in order to provide for secure authentication of a user via biometrics, which are much more difficult to forge or break than a simple user password.

5. Claims 17, 18, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colosso in view of Shanton, further in view of Kennedy.

Regarding Claim 17,

Colosso as modified by Shanton discloses the methods of claims 9 and 10, but does not disclose that the authenticating step includes the use of biometric information.

Kennedy, however, discloses that the authenticating step includes the use of biometric information (Column 3, line 8 to Column 4, line 38). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the security token of Kennedy into the licensing system of Colosso as modified by Shanton in order to provide for secure authentication of a user via biometrics, which are much more difficult to forge or break than a simple user password.

Regarding Claim 18,



Colosso as modified by Shanton discloses the methods of claims 9 and 10, but does not disclose that the authenticating step includes the use of a hardware token.

Kennedy, however, discloses that the authenticating step includes the use of a hardware token (Column 3, line 8 to Column 4, line 38). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the security token of Kennedy into the licensing system of Colosso as modified by Shanton in order to provide for secure authentication of a user via biometrics, which are much more difficult to forge or break than a simple user password.

Regarding Claim 58,

Colosso as modified by Shanton discloses the methods of claims 9 and 10, but does not disclose that the decentralized public network is a cellular phone network.

Kennedy, however, discloses that the decentralized public network is a cellular phone network (Column 3, line 8 to Column 4, line 38). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the security token of Kennedy into the licensing system of Colosso as modified by Shanton in order to provide for secure authentication of a user via biometrics, which are much more difficult to forge or break than a simple user password.

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6. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colosso in view of Win.

Regarding Claim 21,

Colosso does not disclose that the authenticating step includes the use of a record of time at which the request was made.

Win, however, discloses that the authenticating step includes the use of a record of time at which the request was made (Column 9, lines 46-52; and Column 15, lines 46-60). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the role-based access control system of Win into the licensing system of Colosso in order to detect login anomalies and take action against such anomalies in order to further protect against unauthorized access.

Regarding Claim 22,

Colosso does not disclose that the authenticating step includes the use of a record of the user's physical location.

Win, however, discloses that the authenticating step includes the use of a record of the user's physical location (Column 9, lines 46-52; and Column 15, lines 46-60). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the role-based access control system of Win into the licensing system of Colosso in order to detect login anomalies and take action against such anomalies in order to further protect against unauthorized access.

7. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colosso in view of Shanton, further in view of Win.

Regarding Claim 21,

Colosso as modified by Shanton does not disclose that the authenticating step includes the use of a record of time at which the request was made.

Win, however, discloses that the authenticating step includes the use of a record of time at which the request was made (Column 9, lines 46-52; and Column 15, lines 46-60). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the role-based access control system of Win into the licensing system of Colosso as modified by Shanton in order to detect login anomalies and take action against such anomalies in order to further protect against unauthorized access.

Regarding Claim 22,

Colosso as modified by Shanton does not disclose that the authenticating step includes the use of a record of the user's physical location.

Win, however, discloses that the authenticating step includes the use of a record of the user's physical location (Column 9, lines 46-52; and Column 15, lines 46-60). It would have been obvious to one of ordinary

skill in the art at the time of applicant's invention to incorporate the role-based access control system of Win into the licensing system of Colosso as modified by Shanton in order to detect login anomalies and take action against such anomalies in order to further protect against unauthorized access.

8. Claims 1-16, 18-22, 52, and 54-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halter (U.S. Patent 5,319,705) in view of Win (U.S. Patent 6,161,139).

Regarding Claim 1,

Halter discloses a method for providing cryptographic capabilities to a plurality of network users over a decentralized public network comprising receiving a request for an access permission security profile on behalf of a network user (Column 8, line 61 to Column 9, line 27); creating the access permission security profile to be used in forming a cryptographic key for enabling the network user to decrypt selected portions of an encrypted object and to encrypt selected portions of a plaintext object (Column 8, line 61 to Column 10, line 16); and securely transmitting the access permission security profile to the network user over the network (Column 8, line 61 to Column 10, line 16);

But does not explicitly disclose authenticating the request.

Win, however, discloses authenticating the request (Column 9, lines 36-45; and Column 10, lines 26-40). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the RBAC system of Win into the access control system of Halter in order to authenticate and authorize a user to access encrypted materials based on roles that are easy to configure, reconfigure, and administer.

Regarding Claim 2,

Halter as modified by Win discloses the method of claim 1, in addition, Halter discloses that the creating step comprises identifying one or more users who are to be provided with cryptographic capabilities; establishing one or more access codes for each user wherein each access code is adapted to be combined with other components to form a cryptographic key; and creating one or more security profiles for each network user, wherein each security profile contains at least one access code (Column 8, line 61 to Column 10, line 16); and Win discloses that the access codes are based upon groups of users (Column 10, lines 26-49; and Column 13, lines 32-44).

Regarding Claim 3,

Halter as modified by Win discloses the method of claim 2, in addition, Win discloses that each group is a category, organization,

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organization unit, role, work project, geographical location, workgroup, or domain (Column 13, lines 32-44).

Regarding Claim 4,

Halter discloses a method for providing decryption capabilities to a plurality of network users over a decentralized public network comprising receiving a request for decryption capabilities on behalf of a network user (Column 8, line 61 to Column 9, line 27); creating an access permission security profile to be used in forming a cryptographic key for enabling the network user to decrypt an encrypted object (Column 8, line 61 to Column 10, line 16); receiving from the user information associated with the encrypted object (Column 8, line 61 to Column 10, line 16); generating a cryptographic key using the access permission security profile and the received information associated with the encrypted object (Column 8, line 61 to Column 10, line 16); and securely transmitting the cryptographic key to the network user over the network (Column 8, line 61 to Column 10, line 16);

But does not explicitly disclose authenticating the request.

Win, however, discloses authenticating the request (Column 9, lines 36-45; and Column 10, lines 26-40). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the RBAC system of Win into the access control system of Halter in order to authenticate and authorize a user to access encrypted

materials based on roles that are easy to configure, reconfigure, and administer.

Regarding Claim 5,

Halter as modified by Win discloses the method of claim 4, in addition, Halter discloses that the creating step comprises identifying one or more users who are to be provided with cryptographic capabilities; establishing one or more access codes for each user wherein each access code is adapted to be combined with other components to form a cryptographic key; and creating one or more security profiles for each network user, wherein each security profile contains at least one access code (Column 8, line 61 to Column 10, line 16); and Win discloses that the access codes are based upon groups of users (Column 10, lines 26-49; and Column 13, lines 32-44).

Regarding Claim 6,

Halter as modified by Win discloses the method of claim 5, in addition, Win discloses that each group is a category, organization, organization unit, role, work project, geographical location, workgroup, or domain (Column 13, lines 32-44).

Regarding Claim 7,

Halter discloses a method for cryptographically securing the distribution of information over a decentralized public network to a plurality of network users comprising:

Creating a computer representable data object including one or more embedded objects (Column 8, line 61 to Column 10, line 16; and Column 23, line 51 to Column 24, line 32);

Selecting one or more embedded objects of the data to be encrypted (Column 8, line 61 to Column 10, line 16; and Column 23, line 51 to Column 24, line 32);

Encrypting the selected embedded objects (Column 8, line 61 to Column 10, line 16; and Column 23, line 51 to Column 24, line 32);

Creating one or more access permission credentials (Column 8, line 61 to Column 10, line 16; and Column 23, line 51 to Column 24, line 32);

Assigning an access permission credential to each of the selected embedded objects, wherein the access permission credential ensures that only authorized users are able to decrypt encrypted embedded objects of the data object (Column 8, line 61 to Column 10, line 16; and Column 23, line 51 to Column 24, line 32);

Transmitting the data object over the network (Column 8, line 61 to Column 10, line 16; and Column 23, line 51 to Column 24, line 32);

But does not explicitly disclose authorizing at least one network user from the plurality of network users.

Win, however, discloses authorizing at least one network user from the plurality of network users (Column 9, lines 36-45; and Column 10,



lines 26-40). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the RBAC system of Win into the access control system of Halter in order to authenticate and authorize a user to access encrypted materials based on roles that are easy to configure, reconfigure, and administer.

Regarding Claim 8,

Halter as modified by Win discloses the method of claim 7, in addition, Halter discloses that the information is digital content (Column 7, line 63 to Column 8, line 25).

Regarding Claim 9,

Halter discloses that the authorizing step includes receiving a request for an access permission security profile on behalf of a network user, and securely transmitting the security profile to the network user over the network (Column 8, line 61 to Column 10, line 16); and Win discloses authenticating the request (Column 9, lines 36-45; and Column 10, lines 26-40).

Regarding Claim 10,

Halter discloses that the authorizing step includes sending a request for an access permission security profile on behalf of a network user to a centralized server system over the network, receiving the request at the centralized server system, and securely transmitting the access permission security profile from the server system to the network

user over the network (Column 8, line 61 to Column 10, line 16); and Win discloses authenticating the request (Column 9, lines 36-45; and Column 10, lines 26-40).

Regarding Claim 11,

Win discloses that the authorizing step is automatic and based upon the user's possession of an access permission security profile (Column 10, lines 26-40).

Regarding Claim 12,

Halter discloses that the encrypting step comprises identifying an entity who is to be allowed access to a data object to be encrypted; generating an appropriate cryptographic credential key from a set of credential categories, the credential key relating to the entity; generating a cryptographic working key from at least a domain component, a maintenance component, and a pseudorandom component; encrypting the data object with the working key; encrypting the pseudorandom component with the credential key; and associating the encrypted pseudorandom component with the encrypted data object (Column 8, line 61 to Column 10, line 16; and Column 21, line 7 to Column 24, line 32); and win discloses that the entity comprises a group of network users (Column 10, lines 26-49; and Column 13, lines 32-44).

Regarding Claim 13,

Halter discloses that the creating step comprises identifying one or more users who are to be provided with cryptographic capabilities; establishing one or more access codes for each user wherein each access code is adapted to be combined with other components to form a cryptographic key; and creating one or more security profiles for each network user, wherein each security profile contains at least one access code (Column 8, line 61 to Column 10, line 16); and Win discloses that the access codes are based upon groups of users (Column 10, lines 26-49; and Column 13, lines 32-44).

Regarding Claim 14,

Win discloses that each group is a category, organization, organization unit, role, work project, geographical location, workgroup, or domain (Column 13, lines 32-44).

Regarding Claim 15,

Halter as modified by Win discloses claims 1, 4, and 9, in addition, Halter discloses that the request is initiated in band by the network user over the network (Column 8, line 61 to Column 10, line 16).

Regarding Claim 16,

Halter as modified by Win discloses claims 1, 4, 9, 10, and 11, in addition, Win discloses that the access permission security profile is in the form of a token that is adaptable to expire (Column 10, lines 50-62).

Regarding Claim 18,

Halter as modified by Win discloses claims 1, 4, 9, and 10, in addition, Win discloses that the authenticating step includes the use of a hardware token (Column 27, lines 27-40).

Regarding Claim 19,

Halter as modified by Win discloses claims 1, 4, 9, and 10, in addition, Win discloses that the authenticating step includes the use of a software token (Column 17, lines 24-33).

Regarding Claim 20,

Halter as modified by Win discloses claims 1, 4, 9, and 10, in addition, Win discloses that the authenticating step includes the use of a user password (Column 9, lines 25-35).

Regarding Claim 21,

Halter as modified by Win discloses claims 1, 4, 9, and 10, in addition, Win discloses that the authenticating step includes the use of a record of time at which the request was made (Column 9, lines 46-52).

Regarding Claim 22,

Halter as modified by Win discloses claims 1, 4, 9, and 10, in addition, Win discloses that the authenticating step includes the use of a record of the user's physical location (Column 15, lines 46-60).

Regarding Claim 52,

Halter discloses a centralized security management system for distributing cryptographic capabilities to a plurality of network users over a

decentralized public network comprising: a plurality of member tokens for providing cryptographic capabilities to users of the decentralized public network (Column 8, line 61 to Column 10, line 16); a set of server systems for managing the distribution of the member tokens (Column 8, line 61 to Column 10, line 16); means for requesting a member token from at least one server system (Column 8, line 61 to Column 10, line 16); a set of client systems, wherein each client system includes means for receiving the requested member token and means for utilizing the cryptographic capabilities provided by the member token for selective encryption and decryption (Column 8, line 61 to Column 10, line 16); and means for securely distributing a requested member token from at least one server system to at least one client system over the decentralized public network (Column 8, line 61 to Column 10, line 16);

But does not explicitly disclose authenticating the request.

Win, however, discloses authenticating the request (Column 9, lines 36-45; and Column 10, lines 26-40). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the RBAC system of Win into the access control system of Halter in order to authenticate and authorize a user to access encrypted materials based on roles that are easy to configure, reconfigure, and administer.

Regarding Claim 54,

Halter as modified by Win discloses the system of claim 52, in addition, Halter discloses that the means for requesting a member token resides on each client system (Column 8, line 61 to Column 10, line 16).

Regarding Claim 55,

Halter as modified by Win discloses the system of claim 52, in addition, Win discloses that means for authenticating a user resides on at least one server system (Column 10, lines 26-40).

Regarding Claim 56,

Halter as modified by Win discloses the system of claim 52, in addition, Win discloses that managing the distribution of the member tokens includes dynamic updating of the member tokens (Column 17, lines 37-48).

Regarding Claim 57,

Halter as modified by Win discloses claims 1, 4, 7, and 52, in addition, Win discloses that the decentralized public network is the Internet (Column 4, lines 46-57).

9. Claims 17, 53, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halter in view of Win, further in view of Kennedy.

Regarding Claim 17,

Halter as modified by Win does not disclose that the authenticating step includes the use of biometric information.

Kennedy, however, discloses that the authenticating step includes the use of biometric information (Column 3, line 8 to Column 4, line 38). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the security token system of Kennedy into the access control system of Halter as modified by Win in order to provide for secure authentication of a user via biometrics, which are much more difficult to forge or break than a simple user password.

Regarding Claim 53,

Halter as modified by Win does not disclose that each client system further includes user authentication means.

Kennedy, however, discloses that each client system further includes user authentication means (Column 3, line 8 to Column 4, line 38). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the security token system of Kennedy into the access control system of Halter as modified by Win in order to provide for secure authentication of a user via biometrics, which are much more difficult to forge or break than a simple user password.

Regarding Claim 58,

Halter as modified by Win does not disclose that the decentralized public network is a cellular phone network.

Kennedy, however, discloses that the decentralized public network is a cellular phone network (Column 3, line 8 to Column 4, line 38). It

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would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the security token system of Kennedy into the access control system of Halter as modified by Win in order to provide for secure authentication of a user via biometrics, which are much more difficult to forge or break than a simple user password.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Popham whose telephone number is (571)-272-7215. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Jeffrey D Popham  
Examiner  
Art Unit 2137

  
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SUPERVISORY PATENT EXAMINER